

Trauma in Rural Areas is a Special Concern

Why are those in rural areas at increased risk for trauma deaths?

1. It can be more difficult to communicate with emergency medical services (EMS) in rural areas where an injury has occurred.
2. Ambulances often are not available. If ambulances are available, they may not have the equipment or training to appropriately care for trauma patients.
3. The time it takes an ambulance crew to arrive at the scene of a rural injury can be much greater than in urban areas, due to either:
 - a. Distance
 - b. Rural geography
 - c. The fact that ambulances in rural areas must drive over more secondary roads.
4. Most rural hospitals don't have the resources (like surgical specialties or advanced equipment) to provide definitive trauma care, and there tends to be no trauma centers in rural areas.
5. Arranging transfers of trauma patients from rural hospitals to trauma centers often takes hours, resulting in more severe injuries and deaths.
6. Rural patients have more disease-related factors to begin with than do urban patients (for example, they are older and tend to have less access to regular medical care).
7. Rural occupations overall tend to be more dangerous than those in urban areas – the occupations with the highest mortality and disability rates (miners, farmers and lumberjacks) are primarily based in rural areas.

Fact: At least 60% of all trauma deaths occur in areas of the United States where only 25% of the population lives.

Residents in some regions of Indiana don't have the same access to quality trauma care as others. An integrated trauma system begins the process of addressing that inequality. Of note is the 2005 study that found that 79% of Americans feel it is extremely or very important for people in rural areas to have the same access to trauma care as do those in urban or suburban areas.

More specifically, what is Indiana doing to give residents of rural Indiana more access to trauma care?

- The Indiana EMS Commission has passed a new rule that requires the most seriously injured patients to be taken to a trauma center unless the nearest trauma center is more than 45 minutes away or the patient's life is endangered by going

directly to a trauma center. The new rule is expected to result in the creation of more trauma centers and more patients being taken to trauma centers.

- The Indiana State Department of Health's (ISDH) Division of Trauma and Injury Prevention has obtained federal grant money to use in two ways to improve trauma care in rural areas.

There are presently nearly 200 professionals classified as "EMT-Intermediate," a classification that has been phased out as a result of new national standards. Those classified as EMT-Intermediates, who practice mostly in rural areas of Indiana, have the choice to transition down to the next lowest certification or transition up to the next highest certification, which is "Paramedic." The ISDH and the Department of Homeland Security are working to develop a scholarship program for EMT-Intermediates who wish to transition up to Paramedic certification, leading to more Paramedics in rural areas.

Secondly, the ISDH is going to make money available to trauma centers and rural hospitals to facilitate more Rural Trauma Team Development courses (RTTDC) throughout the state. The course was developed by the American College of Surgeons' rural trauma committee and seeks to improve the quality of care in rural communities by developing a timely, organized, rational response to the care of the trauma patient and a team approach that addresses common problems in initial assessment and stabilization. Rural hospital emergency departments often receive seriously injured patients that ideally should be taken directly to a trauma center – the essence of the RTTDC is helping the rural hospital decide quickly whether it can meet the patient's needs or whether the patient should be stabilized and transferred to a trauma center.

More facts about trauma in rural areas:

Approximately 36% of Indiana's hospitals (46 of 129) are located in rural parts of the state, and 16 of Indiana's 92 counties don't have a hospital.

One study found that trauma patients who die in a rural area without a formal trauma system are less severely injured than those in urban areas, but are more likely to die at the scene of the incident.

Between 2000 and 2007, more than 135 fatal motor coach crashes occurred every year in the United States. 25% of those crashes were in rural areas, yet the rural bus crashes accounted for 56% of the fatalities and 72% of the non-fatally injured patients.

Kentucky's trauma system has found that the death risk for rural trauma patients is 15 times greater than it is for urban trauma patients and that preventable deaths in the rural trauma setting are 30% higher than in urban settings.

Fatality rates from rural vehicular trauma are almost double those found in urban settings.

An Alabama study found increased EMS pre-hospital time to be associated with higher mortality rates in rural settings.